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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,546	03/29/2005	Tomoko Aono	1907-0221PUS1	7905
2292 7590 01/29/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER FLETCHER, JAMES A				
ART UNIT 2621		PAPER NUMBER		
NOTIFICATION DATE 01/29/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/529,546

Applicant(s)

AONO ET AL.

Examiner

JAMES A. FLETCHER

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 7, 8 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 8 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 2, 7, 8 and 12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plourde, Jr. et al (7,257,308) and further in view of Dean et al (5,303,326).

Regarding claims 1 and 7, Plourde, Jr. et al disclose a moving image/audio recording apparatus and method comprising:

- a memory and step for temporarily storing moving image data and/or audio data (Col 18, lines 21-23 "Storage device 373 comprises storage for media content that can be written to for storage and later read from for retrieval for presentation") irrespective of an instruction to start recording (Col 14, lines 30-36 "according to a plurality of tuners, and respective number of demodulating systems 313, demultiplexing systems 315, and signal

- processing systems 314, a respective number of broadcast digital media content instances are received and routed to the hard disk 300 of storage device 373 simultaneously” and Col 20, lines 8-11 “The PVR application 377 provides for media content recording functionality by enabling the temporary writing to, and if requested, more permanent recording to the storage device 373”);
- a recording unit and step for recording the moving image data and/or audio data in response to the instruction to start recording (Col. 20, lines 17-22 “The media content stored in the TSB 378 will either be deleted...or retained [through election by the user] as a permanent recording” and Col 28, lines 30-31 “The user request can be explicit or implicit based on viewing habits”); and
 - an encoding unit and step for encoding the moving image and/or audio in specified encoding conditions (Col. 20, line 67 – Col 21, line 2 “analog video signals are compressed into digital form by the encoder 317 [Fig. 3A], or other digitizing hardware of software”),
 - wherein, in response to the instruction to start recording, the recording unit reserves a dummy area for transfer (Col 25, lines 33-41 “When a user requests that at least one of the media content instances included in the time shift buffer [TSB] 378 becomes permanently recorded, this request is communicated to the PVR application 377 and the flag is set to “1”. The PVR application 377 then causes the media content instance to be allocated in non-buffer space [i.e. the associated clusters are removed from the TSB 378,

- or rather, re-designated as non-buffer space clusters] in the storage device 373"); and
- if the moving image data and/or the audio data from the time which goes back from the time of the instruction to start recording are/is recorded in the recording unit, the time which goes back is subsequent to the time when the encoding conditions are changed to those at the time of the instruction to start recording (Col. 24, lines 4-10 "FIG. 8 represents a live point 430 of 10:30. At this point, the 10:00 media content instance stored in the storage device 373 under filename "A/V file x+5" is over and "A/V file x+5" 406 is closed. A new file, "A/V file x+6" 407, is created for representing the 10:30 media content instance, and a new associated management file is created also").

Plourde, Jr. et al disclose ending a recording, but do not specifically disclose moving buffer data after that command.

Dean et al teach the transfer of audio data after an instruction to end recording (Col 12, lines 11-18 "When the audio program has been completed, a stop recording signal is given which causes the DSP chip 6 to cease transferring data bytes to the record FIFO 9 and causes the computer 2 to transfer the remaining data bytes from the FIFO 9 to expanded RAM 21 and any partially filled full buffer from expanded RAM 21 to the disk 3").

As taught by Dean et al, transfer of buffer data to a storage medium after an instruction to end recording is well known, providing the user with a complete recording on the recording medium, and it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Plourde, Jr. et al to include such a data transfer.

Regarding claims 2 and 8, Plourde, Jr. et al disclose a moving image/audio recording apparatus and method comprising:

- a memory and step for temporarily storing moving image data and/or audio data (Col 18, lines 21-23 "Storage device 373 comprises storage for media content that can be written to for storage and later read from for retrieval for presentation") irrespective of an instruction to start recording (Col 14, lines 30-36 "according to a plurality of tuners, and respective number of demodulating systems 313, demultiplexing systems 315, and signal processing systems 314, a respective number of broadcast digital media content instances are received and routed to the hard disk 300 of storage device 373 simultaneously" and Col 20, lines 8-11 "The PVR application 377 provides for media content recording functionality by enabling the temporary writing to, and if requested, more permanent recording to the storage device 373");
- a recording unit and step for recording the moving image data and/or audio data in response to an instruction to start recording (Col. 20, lines 17-22 "The media content stored in the TSB 378 will either be deleted...or retained [through election by the user] as a permanent recording" and Col 28, lines 30-31 "The user request can be explicit or implicit based on viewing habits"); and

- a switching unit and step for switching moving image and/or audio to other moving image and/or other audio (Col 10, lines 42-44 "Tuner system 345 can select from a plurality of transmission signals [FIG. 1B] provided by the subscriber television system"),
- and wherein in response to the instruction to start recording, the recording unit reserves a dummy area for transfer (Col 25, lines 33-41 "When a user requests that at least one of the media content instances included in the time shift buffer [TSB] 378 becomes permanently recorded, this request is communicated to the PVR application 377 and the flag is set to "1". The PVR application 377 then causes the media content instance to be allocated in non-buffer space [i.e. the associated clusters are removed from the TSB 378, or rather, re-designated as non-buffer space clusters] in the storage device 373"); and
- if the moving image data and/or the audio data from the time which goes back from the time of the instruction to start recording are/is recorded in the recording unit, the time which goes back is subsequent to the time when the moving image and/or audio are/is switched to those at the time of the instruction to start recording (Col. 24, lines 4-10 "FIG. 8 represents a live point 430 of 10:30. At this point, the 10:00 media content instance stored in the storage device 373 under filename "A/V file x+5" is over and "A/V file x+5" 406 is closed. A new file, "A/V file x+6" 407, is created for representing the

10:30 media content instance, and a new associated management file is created also”).

Plourde, Jr. et al disclose ending a recording, but do not specifically disclose moving buffer data after that command.

Dean et al teach the transfer of audio data after an instruction to end recording (Col 12, lines 11-18 “When the audio program has been completed, a stop recording signal is given which causes the DSP chip 6 to cease transferring data bytes to the record FIFO 9 and causes the computer 2 to transfer the remaining data bytes from the FIFO 9 to expanded RAM 21 and any partially filled full buffer from expanded RAM 21 to the disk 3”).

As taught by Dean et al, transfer of buffer data to a storage medium after an instruction to end recording is well known, providing the user with a complete recording on the recording medium, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Plourde, Jr. et al to include such a data transfer.

Regarding claim 12, Plourde, Jr. et al disclose a moving image/audio recording apparatus comprising:

- a memory for temporarily storing moving image data and/or audio data (Col 18, lines 21-23 “Storage device 373 comprises storage for media content that can be written to for storage and later read from for retrieval for presentation”), irrespective of an instruction to start recording (Col 14, lines 30-36 “according to a plurality of tuners, and respective number of

demodulating systems 313, demultiplexing systems 315, and signal processing systems 314, a respective number of broadcast digital media content instances are received and routed to the hard disk 300 of storage device 373 simultaneously" and Col 20, lines 8-11 "The PVR application 377 provides for media content recording functionality by enabling the temporary writing to, and if requested, more permanent recording to the storage device 373");

- a recording unit for recording the moving image data and/or audio data in response to the instruction to start recording (Col. 20, lines 17-22 "The media content stored in the TSB 378 will either be deleted...or retained [through election by the user] as a permanent recording" and Col 28, lines 30-31 "The user request can be explicit or implicit based on viewing habits"); and
- an encoding unit for encoding the moving image and/or audio in specified encoding conditions (Col. 20, line 67 – Col 21, line 2 "analog video signals are compressed into digital form by the encoder 317 [Fig. 3A], or other digitizing hardware of software"), wherein
- in response to the instruction to start recording, the recording unit reserves a dummy area for transfer (Col 25, lines 33-41 "When a user requests that at least one of the media content instances included in the time shift buffer [TSB] 378 becomes permanently recorded, this request is communicated to the PVR application 377 and the flag is set to "1". The PVR application 377 then causes the media content instance to be allocated in non-buffer space

[i.e. the associated clusters are removed from the TSB 378, or rather, re-designated as non-buffer space clusters] in the storage device 373")

. Plourde, Jr. et al disclose ending a recording, but do not specifically disclose moving buffer data after that command.

Dean et al teach the transfer of audio data after an instruction to end recording (Col 12, lines 11-18 "When the audio program has been completed, a stop recording signal is given which causes the DSP chip 6 to cease transferring data bytes to the record FIFO 9 and causes the computer 2 to transfer the remaining data bytes from the FIFO 9 to expanded RAM 21 and any partially filled full buffer from expanded RAM 21 to the disk 3").

As taught by Dean et al, transfer of buffer data to a storage medium after an instruction to end recording is well known, providing the user with a complete recording on the recording medium, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Plourde, Jr. et al to include such a data transfer.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. FLETCHER whose telephone number is (571)272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF
8 January 2009

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621